

# **Foldable Table Assembly For Onto The Wall**

## **Field of Invention**

This present invention relates to a foldable table structure, special about to  
5 use onto the wall as a foldable desk or dresser, which provide the unit to be  
combined the foldable table, and snapped onto the wall as a unit set.

## **Background of Invention**

For those architectures as house or the small hotel, the interior space was  
10 built to be very limited. Except the necessary furniture such as bed, bathing room,  
the rest of it would be designed at the minimum requirements. As for the  
traditional writing table, desk, or dresser would take the space as big as a small  
closet. In the limited space interior room space, especially for the desk, which  
would be, considered the necessary furniture to increase owner's convenience.  
15 But it also would be treated as space-taking furniture, in the most families would  
take the dinning tables instead. But there still some kind of greasing applied to  
it, besides the environment is not so quiet, which might cause certain kind of  
uncomfortable feelings to the readers and/or writers.

20 As above-mentioned, both for the house and/or interior decoration  
designer, or the furniture manufacturers who know too well the necessity of  
writing table or desk. Owing to their deeply rooted concept and technology, they  
simply could not reduce the size of traditional writing table, desk, or dresser .The  
most of the people who also took the huge rectangular writing table, desk, or  
25 dresser to be irreplaceable or no room for improving the final type. Whatever,  
that traditional and invisible space to be used in the interior space among the

architectures should be use more effectively, would become the theme to be improved.

### **Summary of the Invention**

5           The main theme of this invention, is providing a foldable table to be able hang onto the wall without taking hardly any space, it fixes onto the wall to be united as one. To be opened when it is opened to flatted out as a table to be used as writing table or dresser.

10           The other purpose for this invention is providing a foldable table to be able hanged onto the wall, which hanger body would form an inner deep space inside of it. There are several units to put thing onto it, such as, the documents, stationary, or books. The space or the fixed unit would be able to added a mirror, make the inner deep space that could be used to put the jewelry and cosmetics to  
15   fulfill the function of the dresser.

          The further purpose is provided the illumination hangover hanger body set. To be opened the table plate from the hanger body, it could automatically proved the illumination unit that is designed to be on/off simultaneously with the  
20   open and/or close the table plate.

          The other purpose for this invention, is providing, an emergency illumination function foldable table assembly for onto the wall.

25           Another purpose of this invention is provided a simply foldable table to be able hanged onto the wall, the table plate will be formed as a free beam which

supported by the lower part of the hanger body when the table plate opened from the hanger body.

This invention is provided the foldable table assembly for onto the wall  
5 which included a hanger body to be a fixed on to the wall, it is aid that a fixed frame or a kind of wall plate.

The invention has another feature to be flopped over the table plate to be pivoted freely to be connected to the onto the hanger body. Both of them would  
10 be unified as one; beside these units, there is a support unit, keep the table plate and the hanger body to the fixed position. The function of it is to support the table plate when opened the plate, also make the table plate to maintain to be leveled. So the fixed unit to be fixed onto the wall, the plate could be acted accordingly the state of opening and/or close, to be performed selectively to be a table plate or  
15 the hanger body's door.

The preferred embodiment of this invention is to preset some holes for be applied for the screws or nails to put through. Another feature would be the hanger body to have connected a side plate that connected to the outside of the  
20 fixed unit. There would be an inner deep space to be formed by the side plate and the fixed unit that formed to be a shallow box hollow inside such as a flat rectangular box-shaped structure. The hanger body inner keeps space to have several separated cabinets to put the documents, stationary, or books, etc.

25 Besides, the preferred embodiment for application is got a snapped on unit, which could be snapped the table plate on to the hanger body. The side part

of hanger body could include an illumination unit. Such as an energy-saving light bulb or other illumination apparatus at upper part of the hanger body. The illumination unit could be composite of a light shade; the part of the light shade should be designed to be good at transparent. The best part is to be included one  
5 on/off switch. When the table plate to be opened from the hanger body, it will supply the electric power automatically to the illumination unit, vice the versa, when the table plate to be closed back to the hanger body, it would cut out the electric power supply.

10 The preferred embodiment for simplified the structure of this invention, the lower edge of the table plate would be to stretch under the lower part of the hanger body and touch each other when the table plate opened from the hanger body, so the table plate be formed as a free beam which could supported by the lower part of the hanger body.

15 This invention's application to the interior of architectures, would be much more space saving to the traditional type of the writing table or desk, it would be open/close according to the user's request freely. When it is closed it would almost to become one of the wall part. This invention's manufacturing cost  
20 would be much more saving then the traditional type of the writing table or desk. Which is easier to produce and move. One could be easily to set up into the house no matter it is a new one or the existing residence, it could be DIY on the walkway, on wall of the certain room, or built into the wall or the closet.

## 25 **Brief Description Of The Drawings**

Fig. 1 is an exploded perspective view of the embodiment of the foldable table to be able hangs onto the wall in the present invention.

Fig. 2 is a perspective view similar to Fig. 1.

Fig. 3 is a perspective view similar to Fig. 2, but shows the table foldable.

5 Fig. 4 is a perspective view of the embodiment of the present invention in another side, and shows the foldable table closed.

Fig. 5 is a side view of Fig. 4, and shows the present invention is hanged onto the wall.

Fig. 6 is an enlarged view of Fig. 5.

10 Fig. 7 is a perspective view similar to Fig. 2, but shows another embodiment.

Fig. 8 is a cross-sectional side view, similar to Fig. 7, but shows another embodiment.

### **Detailed description of the Preferred Embodiment**

15 As Figs. 1, 2, 5, 6, and shown, this invention is use to the onto wall portable table assembly, mainly included: a hanger body 10 that has a fixed unit 11; and a table plate 20.

A joint unit 30 to put the table plate 20 as a to be pivoted in order to close  
20 and open freely to be connected to a fixed unit 11 of the hanger body 10, which would both of them would be unified as one. The joint unit 30 as shown on the Figs. 1 to 6, able to for setting is pivoted each side of the table plate 20 and the hanger body 10, or as shown on the Figs. 7 and 8, for setting is the under the table plate 20 and the hanger body10, which would make the table plate 20 foldable.  
25 Arrow headed as shown on the Figs. 3 and 8, when opened downward the close and open freely pivot. There is a support unit 40 such used as the Figs. 7 and 8,

shown the elbow connector; or as shown on the Figs. 1 to 6, such used as a free beam which table plate 20 could supported by the lower part of the hanger body. Anyway, when the table plate 20 opened, the support unit 40 could support the table plate 20 which make table plate 20 to keep it leveled as shown in Figs. 6  
5 and 8.

When the fixed unit 11 to be fixed onto the wall 50 which shown on the Figs. 2 and 5, the table plate 20 would become selectively the part, as door, of hanger body 10 or the writing table, dresser or the table or cupboard etc. It is said  
10 that when the table plate 20 to put on the closing position, it is the door in a sense; but when it is opened downward to become a writing table etc. The preferred embodiment, fixed unit 11, is to preset some holes for be applied for the screws or nails to put holes 12 which shown on the Figs. 1 and 2, which would be more convenience to the installation. Another preferred embodiment, there is a  
15 snapped-on unit 70 shown on the Figs. 7 and 8, such is a pivot on the hanger body 10 for the table plate 20 is snapped onto the hanger body 10. The snapped-on unit 70 as varied as the door lock specials, there is many to be selected. There is one kind of spring snapped-on type could be considered at first priority it must set up along with the table plate's handle (the Fig. is omitted),  
20 when opened the table plate 20, to use the finger pressed the motion piece to inside the handle could made the snapped piece and the onto the wall 10 to separate the slice; vice the versa when the need to close the table plate 20, use the had to push the table plate 20 to close the onto the wall 10 push hard, to made to the motion piece to inside the handle could made withdraw, through the hanger  
25 body 10 slice that made the table plate 20 and the onto the wall 10 close together. No matter how to apply, only to make it is possible to open and close the table

plate 20 by the snapped-on unit 70 easily.

The Fig. 6 is the detailed description of the preferred embodiment for support unit 40 side-view reference drawing. The table plate 20 on the strength of the joint unit 30 to be able to open and let down as show on the dotted line, after let down the table plat 20 the lower inside-edge 21 would stretch in the lower part 15 of the hanger body 10 and connected with the lower part 15 with each other. The table plate 20 such formed as a free beam, which could support by the lower part 15 of the hanger body 10. The preferred embodiment for omitting the support unit entity, such as elbow or link connector, that is also able to open the table plate 20 to make the table plate 20 to be about leveled.

Beside shown on Fig. 8, and also referred to Fig. 7, which the hanger body 10 preferred form the fixed unit 11's edge surrounded the side plate 13, and the top of the side space for the hanger body 10, is suggested to install an illumination unit 80. The side plate 13 and the fixed unit 11 could constructed together with a inner deep space, with hallow box hollow inside to has one opening structure such as a flat rectangular box-shaped structure. The hanger body 10 inner deep space to have several separated cabinets 60 such as hanging plates and /or bags to put the documents, stationary, or books etc. The illumination unit 80 gets a light shield, the part of the light shade should be designed to be good at transparent, and the light shade preferred should be designed varied from the different function requirements. The light shield, comprising upper part 82, front side 83, and /or lower part 84 each has its transparent light shade inside put a light unit 85, which preferred embodiment is a furolence light or energy saving bulb etc. When the embodiment of this

invention to apply the desk or writing table, it is emphasizes up down lightning, so the light upper part 82 and front side 83, cold use the thicker acrylic plate to shadowed the tender light, and lower part 84 of the light shield must use the better pervious or fully transparent plate to cast the brightness. On the other side, when the embodiment to be use as dresser the hanger body 10 form the upper part of the fixed unit 11 should have a mirror 14, shown on Fig. 8, the light supply would be emphasis on the front light use to light up the user's face, so the shade, transparency would change the position, upper part 82 and the lower part 84 use the thicker acrylic plate to shadowed the tender light, the shade and front side 83 use the better pervious or fully transparent acrylic plate to form better lighting.

Beside like it is shown on Fig. 7, there is a on/off switch unit 86, such as the application of limited switch, push bottom switch, or infrared remote reflex switch vice the versa, when to close up the table plate 20 to the hanger body 10, it would automatically closed the supply of the light power. For the better environment to make the lightning more adaptable, there would be set a series manual on/off switch 86 to control if it is need to automatically power supply to the manual on/off switch 86.

20

Although certain preferred embodiment of the present invention has been shown and described in detail, it should be understood that various changes and modification might be made therein without departing from the scope of the appended claims. Every embodiment cannot possibly be illustrated in details; the appended claims of the present invention should not be limited in the literal sense of the words.